

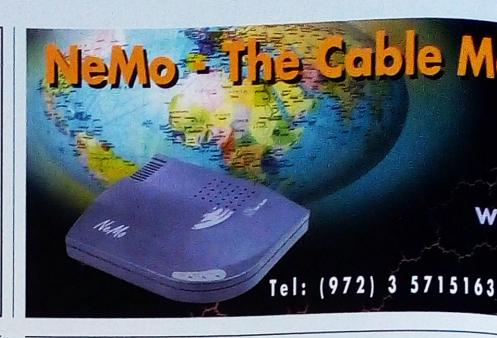


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2000 INTERNATIONAL CABLE-MODEM DEPLOYMENTS



Udeployment chart illustrates the ever-hastening race toward new revenue streams, with rollouts from dozens of operators in nearly 50 coun-

At the same time, while some cable-modem manufactures lead the market in deployments, it's clear that a number of firms are vying for and securing — contracts with cable operators around the world.

So just how important is the international cablemodem market? Well, some of the biggest U.S.based manufacturers say that much more than half

ur second-annual international cable-modem- their sales come form outside their home territory. An in-depth look at the U.S. cable-modem market appears in the March edition of our sis-

ter publication, CED.

mgaletto@cahners.com).

A hearty thanks to cable-modem vendors and others who helped in research this year's chart. Future news on international cablemodem deployments can be sent to CED senior editor Jeff Baumgartner (fax: 1-303-470-4890, e-mail: jbaumgartner@cahners.com) or Multichannel News International managing editor Mike Galetto (fax: 1-212-463-6700, e-mail:

COUNTRY CABLE OPERATOR/TELCO (CITY) **VENDOR** CABLE ISP CABLEVISION S.A 3Com, Com21 CableVisión Argentina Nortel Networks, Motorola MULTICANAL CableNet Argentina SuperCanal SUPERCANAL Com21 Argentina **AUSTAR UNITED COMMUNICATIONS** N/A chello broadband Australia Nortel Networks @Home Australia TELSTRA (Melbourne, Sydney) Motorola, Hybrid Networks Big Pond Australia Austria CABEL SIGNAL **GADline** Cabel Signal chello broadband N/A TELESYSTEM TIROL Austria Nortel Networks, Terayon UPC TELEKABEL chello broadband Austria Cable Bahamas **CABLE BAHAMAS** Terayon Bahamas Brutele BRUTELE (Brussels) Terayon Belgium Telenet Terayon, Motorola TELENET (Flanders) Belgium chello broadband Terayon TVD-RADIO PUBLIC Belgium chello broadband N/A **WOLU TV** Belgium Anatel 3Com ANATEL Brazil GLOBO CABO (São Paulo, Sorocaba) Terayon Virtua Brazil Ajato Brazil 3Com N/A Motorola TV FILME Brazil N/A UNICOMS NetGame Bulgaria Nortel Networks N/A ACCESS CABLE Canada (Nova Scotia, New Brunswick) **Access Communications** N/A **ACCESS COMMUNICAITONS** Canada (Dartmouth, Sackville and Bedford) GADline Canada **BLUEWATER CABLE TV** Road Runner CABLE ATLANTIC (St. John's) Zenith Canada Cable Regina Zenith CABLE REGINA (Regina) Canada Cablenet CABLENET (Burlington, Oakville, Hamilton, Niagara Falls, and Peterborough) Zenith Canada Nortel Networks, Zenith CAPE BRENTON CABLE/ Canada CAPE BRENTON COMMUNITY NETWORK Cisco, Samsung @Home COGECO (Burlington) Canada Nortel Networks, Zenith @Home COGECO (Montreal suburbs) Canada Zenith @Home COGECO (Quebec and Ontario) Canada @Home N/A COGECO (Toronto, Windsor) Canada COMPTON CABLE **GADline** N/A Canada N/A Com21 Canada **DELTA CABLE** COMMUNICATIONS (Delta, British Columbia) Nortel Networks @Home EASTERN CABLE (Halifax) Canada EastLink Canada **EASTLINK COMMUNICAITONS** Com21 (Halifax) Scientific-Atlanta N/A Canada **FUNDY COMMUNICATIONS** (Moncton, Fredercton Oromocto and St. John's) HALIFAX CABLE (Halifax) Com21 Canada N/A INUVIK TV (Inuvik, Arctic Circle) Zenith LINDSAY COMCABLE **GADline** N/A Canada Nortel Networks @Home Canada MOUNTAIN CABLE (Hamilton) MS CABLE TV **GADline** MS CableTV Canada MUSKOKA CABLE SYSTEMS **GADline** N/A Canada 3Com Canada NORTHERN CABLE (Sudbury) Adesso Motorola, Zenith OSG CABLE (Terrace) Canada SpeedLink Canada PEACHTREE CABLE N/A cableLAN.net ROGERS CABLE Canada Terayon @Home (Abbotsford, Port Coquitlan, Surrey)

COUNTRY	CABLE OPERATOR/TELCO (CITY)	VENDOR	CABLE ISP
Canada	ROGERS CABLE (Cambridge, Guelph, Kichener,	Terayon	@Home
Canada	ROGERS CABLE (Newmarket, North York, Brampton, Bradford, Ottawa, SW Ontario and Toronto)	Nortel Networks, Terayon, Toshiba, Zenith	@Home
Canada	ROGERS CABLE (Hamilton)	Terayon, Zenith	@Home
Canada	ROGERS CABLE (Vancouver)	Zenith, Terayon, Toshiba	@Home
Canada	SAUTEL (Hanover)	N/A	Sautel
Canada	SEASIDE CABLE (Cape Breton)	Nortel Networks, Zenith	N/A
Canada	SHAW CABLESYSTEMS (Calgary and Toronto)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Cordova Bay, Fernwood, Gordon Head, James Bay)	Terayon	
Canada	SHAW CABLESYSTEMS (Barrie, Bolton, Cedar Mills, Holly, Vernon)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Edmonton)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Ft. McMurray)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Ft. Saskatchewan, Leduc, Red Deer, Sherwood Park)	Terayon	Gunie
Canada	SHAW CABLESYSTEMS (Kelowna, Langford, Metchosin, Nanimo)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Markham, Midhurst, Orangeville, Palgrave)	Terayon	@Home
Canada Canada	SHAW CABLESYSTEMS (Oak Bay, Royal Oak, Saanich, Sooke) SHAW CABLESYSTEMS	Terayon	@Home
Cariaua	(Pickering, Pottageville, Richmond Hill)		
Canada	SHAW CABLESYSTEMS (Saint Albert, Broadmead, Cadboro Bay, Colwood)	Terayon	@Home
Canada	SHAW CABLESYSTEMS (Saskatoon)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS	Terayon	@Home
	(Scarborough, Thornhill, Thornton)		
Canada	SHAW CABLESYSTEMS (Unionville, Vaughan, Woodbridge)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Victoria, Uplands, View Royal)	Motorola, Terayon	@Home
Canada	SHAW CABLESYSTEMS (Winnipeg)	Motorola, Terayon	@Home
Canada	SOUTHMOUNT CABLE	GADline	N/A
Canada	SUNSHINE COMMUNICATIONS (Grand Forks, Christina Lake)	Zenith	N/A
Canada	VIDEON CABLE TV (Winnipeg)	Nortel Networks	Wave
Canada	GROUPE VIDEOTRON	Motorola	Videotron
Canada	(Chicoutimi, Saint Albert) GROUPE VIDEOTRON	Motorola	Videotron
Canada	(Edmonton, Montreal) GROUPE VIDEOTRON	Motorola	Videotron
Canada	(Gatineau, Hull, Laval) GROUPE VIDEOTRON	Motorola	Videotron
	(Monteregie, Papineau)		VIGCORON
Canada	WESTERN CO-AXIAL (Hamilton)	Zenith	N/A
Canada	WESTMAN MEDIA (Brandon)	Nortel Networks	N/A
Chile	TELESYSTEMS CHINA MINISTRY OF	Nortel Networks	Telesystems
China	CHINA MINISTRY OF ELECTRONICS INDUSTRY	Motorola	China Ministry
China	GLW	Hybrid Networks	GLW
China	GUANGZHOU CATV	Hybrid Networks	Guangzhou Cable
China	JIAXING CABLE	N/A	Jiaxing Cable
China	QINGDAO CATV	Nortel Networks	QuingDao
China	SHENZHEN CATV	Terayon Nextel Networks	Shenzhen CATV
China	SHANGHAI CATV TOPWAY CABLE (ShenZen)	Nortel Networks Teravos	Shanghai CATV
Colombia	EEP	Nortel Networks, Terayon GADline	Topway N/A
Colombia	TV CABLE BOGOTA	Motorola	TV Cable Bogota
Czech Republic	DATTELKABEL (Prague)	NetGame	DattelKabel
Denmark	ALCATEL & TELE DENMARK	Hybrid Networks	N/A
Denmark	TELE DENMARK	Harmonic	TeleDenmark
Denmark	TELIA STOFA	Com21	Telia Stofa
quador	TV CABLE DE ECUADOR	Motorola	N/A
inland	TELECOM FINLAND	Zenith, Motorola	Cabinet
rance	CIE. GEN. DE VIDEOCOMMUNICATION (Annecy and Strasbourg)	Motorola Com21	N/A
rance	FRANCE TELECOM LYONNAISE CABLE	Com21 Hybrid Networks Com21	France Telecom
rance	(Angers, Montpellier, Bordeaux, Marseille and St. Quentinen Yvelines)	Hybrid Networks, Com21	Lyonnaise
rance	H. INTERCOM	N/A	chello broadband
rance	MEDIARESEAUX	N/A	N/A
	SPIE TRINDEL	Com21	Spie Trindel
rance			
rance	UPC VIDEOPOLE (Paris)	Terayon Com21	videopole





Muttichannel International

COUNTRY	CABLE OPERATOR/TELCO (CITY)	VENDOR	
Germany	PRIMACOM	VENDOR	CABLE ISP
Germany	KABEL & MEDIEN OF MUNICH	Terayon	PrimiCom
Germany	O.TEL.O	Harmonic Motorola	N/A
Germany	TELE-COLUMBUS	N/A	o.tel.o
Great Britain	CABLE & WIRELESS	Motorola	@Home
Great Britain	NTL	Com21, 3Com	Cable & Wireless
Great Britain	TELEWEST	Nortel Networks	NTL
Hong Kong	HONG KONG CABLE		N/A
Hungary	CORY-NET (Szekszard and Tolna County)	Terayon Nortel Networks	i-CABLE
Hungary	DATATRANS (Szekesfehervar)	N/A	Cory-Net
Hungary	HEVESNET 2000	Nortel Networks	DataTrans
	(Gyorigyos-Byongyossolymos)	Norter Networks	HevesNet
Hungary	SZAB-I-NET	Nortel, Terayon	Cablenet
Hungary	TVNET (Budapest)	Nortel Networks	TVNet
Ireland	CABLELINK	Com21	N/A
Ireland	CABLE MANAGEMENT IRELAND (Dublin)	N/A	Cable Management
Ireland	IRISH MULTICHANNEL	N/A	Irish Multichannel
	(Limerick, Cork, Irish Midlands)		
Israel	GOLDEN CHANNELS	GADline	N/A
Israel	MATAV CABLE	NetGame, GADline	Matav
Israel	NETGAME CABLE (Tel Aviv Hilton Hotel)	NetGame	NetGame
Israel	TEVEL CABLE	NetGame, GADline	Tevel Cable
Jamaica	SPEEDNET COMMUNICATIONS	NetGame	N/A
Japan	CABLE TV YOKKAICHI (Mio)	Nortel Networks	Yokkaichi
Japan	CHIGA SERVICES	Nortel Networks	Chiga
Japan	CTY CABLE	Nortel Networks	CTY Cable
Japan	HEKKAI KATCH NETWORK	Com21	Hekkai Katch
Japan	(Kariya, Anjo, Takahama, Chiryu and Hekinam) HIMAWARI CABLE	Matarala	N/A
Japan	ICC ICC	Motorola N/A	ISP Channel
Japan	JAPAN TELECOM		
Carlotte Van Daniel Carlotte	JUPITER TELECOMMUNICATIONS	NEC	Japan Telecom @Home
Japan	KINTETSU CABLE NETWORK	Terayon	Kinetsu
Japan	KOTO CABLE TELEVISION	Terayon Com21	Koto Cable
Japan	MARUBENI CORP.	Motorola	Marubeni
Japan	MITSUI & CO.	Nortel Networks	N/A
Japan		Nortel Networks	Moshinomitaka
Japan	MOSHINOMITAKA MUSASHINO MITAKA CABLE (Tokyo)	Nortel Networks	Musashino
Japan	MYTV	Terayon	N/A
Japan	NAGOYA CABLE	Nortel Networks	Nagoya Cable
Japan	NIHON NETWORK SERVICE	Com21	Nihon
Japan	SOUTH TOKYO CABLEVISION	NEC	South Tokyo Cablevision
Japan	SUZUKA CABLE CO.	Com21	Suzuka Cable
Japan	TAKAOKA CABLE TV (Toyama)	Toshiba	Takaoka
Japan	TITUS COMMUNICAITONS	Terayon, Com21	AllNet
Japan	TOKYO CABLE NETWORK	Com21	N/A
Japan	TOKYO CABLE (Kawasaki)	Terayon	N/A
Japan	TOKYU CABLE (Nawasan)	Terayon	N/A
Japan	(Shibuya, Tokyo and Yokahama)	icia)on	
Japan	TOWN TV KANAZAWA (Kanagawa)	Nortel Networks, Motorola	Town TV
Japan	TOYOHASHI CABLE NETWORK	NEC	Toyohashi
Japan	TSU CABLE TELEVISION (Mie)	Fujitsu	TSU Cable TV
Japan	UEDA CABLEVISION (Nagano)	Nortel Networks	N/A
Japan	YONAZAWA CABLE TV	Nortel Networks	Yonazawa Cable TV
Japan	YOU CABLE TELEVISION (Kanagawa)	Nortel Networks	You Cable TV
Korea	CABLE & MULTIMEDIA	Terayon	C&M
Korea	KOREA ELECTRIC POWER	Motorola, Samsung	Korea Electric Power
Korea	DACOM	Com21, Hybrid Networks, Samsung	Dacom
Korea	HANARO	Motorola, Samsung	N/A
Korea	THRUNET	Motorola, Samsung	N/A
Lativa	METROMEDIA INTERNATIONAL (Riga)	Hybrid Networks	Metromedia
Mexico	CABLEVISION DE MONTERREY	Motorola	InterCable
Mexico	INTERCABLE (Monterrey)	Motorola	CableLink
Mexico	MEGACABLE	Zenith, Terayon	N/A
Mexico	TELEVISION INTERNATIONAL	Motorola	N/A
Netherlands	A2000	Nortel Networks, Zenith	chello broadband
Netherlands	BRUSSUM CITY	Deltakabel	N/A
Netherlands	CAI WESTLAND (Naaldwijk)	Deltakabel	N/A
Netherlands	CASEMA	Deltakabel	Casema
Netherlands	ENECO (Rotterdam)	Com21	Eneco
Netherlands	KABELFOON/CAI WESTLAND	Deltakabel	N/A
Netherlands	NUTSBEDRIJF	Nortel Networks	N/A
Netherlands	NKM VEENENDAAL	Deltakabel, Nortel Networks	NKM
Netherlands	RENDO (Meppel)	Deltakabel	N/A
Netherlands	TELECAI (Utrecht)	Deltakabel	N/A
Netherlands	TELEKABEL/SONERA	Com21	Telekabel
New Zealand	SATURN CABLE	N/A	chello broadband
Norway	ANETT (Baerum)	Com21	N/A

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COUNTRY	CABLE OPERATOR/TELCO (CITY)	VENDOR	CABLE ISP
orway	AVIDI (Oslo, Trondheim and Molde)	Nortel Networks	N/A
lorway	BAERUM KABELT	Com21	Baerum Kabelt
lorway	JANCO KABEL	Motorola	N/A
Norway	JANCO MULTICOM (Oslo)	Motorola	chello broadband
Norway	NKM	Nortel Networks	N/A
Norway	NORSKE FJERNSYNSANTENNER (Oslo)	Motorola	N/A
Norway	TELENOR AVIDI	NetGame	Telenor
Norway	UPC	Terayon	chello broadband
Panama	CABLE ONDA	Com21	N/A
Peru	TELEFONICA	Terayon	Telefónica
Philippines	DESTINY CABLE (Pasig and Makati)	Com21, NEC	Destiny
Poland	ELSAT	NetGame	N/A
Poland	MULTIMEDIA POLSKA	Motorola	Multimedia Polska
Portugal	CABOVISÃO	Nortel Networks	Cabovisão
Puerto Rico	PEGASUS COMMUNICATIONS (Mayaquez)	N/A	ISP Channel
Puerto Rico	TELEPONCE CABLE	N/A	ISP Channel
Romania	CVR	NetGame	N/A
	KAPPA CABLE	Nortel Networks	KappaNet
Romania		Nortel Networks	Romania Data Systems
Romania	ROMANIA CATV SYSTEMS		CoNEct
Romania	ROMSAT CABLE & RADIO (Bucharest)	Nortel Networks	Pact
Russia	PACT COMPANY (St. Petersburg)	NetGame	
Scotland	TELEWEST	Nortel Networks	Telewest
Singapore	SINGAPORE CABLEVISION	Motorola	N/A
Slovenia	ASTRA TELECOM	NetGame	N/A
Slovenia	ELTRADE	NetGame	Eltrade
lovenia	ELEKTROPROM	NetGame	Elektroprom
lovenia	KRS ROTOVS (Maribor)	NetGame	KRS
Slovenia	MAGLIC TELEKOM	NetGame	Maglic Telekom
Spain	CABLE 1 TELEVISIO DE CATALUNYA	Com21	Cablenauta
	(Girona, Lleida and Terragona)	11/4	aug.
Spain	ONO (Valencia)	N/A	ONO
Spain	TELECABLE (Asturias)	Com21	N/A
Spain	RETECAL (Castilla-Leon)	Com21	Retecal
Spain	SUPERCABLE (Sevilla)	Com21	Supercable
Spain	TELECABLE (Asturias)	Com21	Telecable
Sweden	B2	N/A	B2
Sweden	ENGELHOLMS KABEL TV	Com21, ISC DataCom,	Engelholms
Sundan	LANDONDONALISM (C)	Nortel Networks, Zenith	
Sweden	LANDSKRONAHEM (Simrishamn)	Com21, Zenith	N/A
Sweden	STJARN TV (Stockholm)	N/A	chello broadband
Sweden	SIMRISHAMS EMERGI	Com21	N/A
Sweden	STICKLINGE SATELLITE GROUP ONE	NetGame	N/A
Sweden	TELIA	NetGame	N/A
witzerland	BESONET (Grenchen, Lyss, Brugg)	Terayon	Besonet
Switzerland	CABLECOM HOLDINGS (Zurich)	Com21	Cablecom
witzerland	EW AABERG	Terayon	EW Aaberg
Switzerland	GEMEINDE UITIKON	Terayon	Gemeinde
Switzerland	GEMEINDEBETRIEBE HERZOGENBUCHSEE	Terayon	N/A
Switzerland	GENOSSENSCHAFT	Terayon	N/A
	GENEINSCHAFTSANTENNEN RUSWIL		
Switzerland	INGLOBE	Terayon	Inglobe
witzerland	OSSINGEN KABEL	NetGame	N/A
witzerland	RADIO SCHEFER	Terayon	Radio Schefer
witzerland	R+F-NETZ ZOLLIKON	Nortel Networks	N/A
witzerland	SWISS CABLE NET	Cisco	Swiss Cable Net
Switzerland	TELEZUG (Zug)	Terayon	Telezug
witzerland	TELINDUS	Com21	Telindus
Switzerland	URBANET	Zenith	Urbanet
witzerland	VILLE DE LAUSANNE	Terayon	N/A
aiwan	BAUFU (Taipei)	3Com	N/A
aiwan	CHANDER (Taipei)	3Com	GigaNet
aiwan	ETHOME	Motorola	N/A
aiwan	GIGAMEDIA	3Com	
			GigaNet
aiwan	LIKUAN (Taipei)	3Com	LiKuan
aiwan	TELEFIRST (Taoyuan City)	3Com	GigaNet
aiwan	WANHSIAN (Taipei)	3Com	GigaNet
hailand	UTV	N/A	UTV
Jkraine	GLOBAL UKRAINE	NetGame	N/A
Ikraine	KIEV TELE MONTAZH	NetGame	N/A
Jkraine	INTER VIDEO KIEV	NetGame	N/A
Ikraine	INFORMATION TECHNOLOGIES	NetGame	N/A
		Terayon	

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